Bicycle Collisions: Summary of Findings

Collisions and Fatalities

✍✍A 1994 Metropolitan Washington Council of Governments (COG) household transportation survey estimated that approximately **0.9%** of all daily trips to/from/within the District of Columbia are made on a bicycle. In all likelihood, those figures have risen in the past few years, but that number is a useful reference point from which to evaluate traffic collisions involving cyclists.

✍✍Over the 1997-1999 time period, bicycle collisions account for approximately **2%** of all traffic collisions. The chart below summarizes the number of bicycle collisions as a percentage of all traffic collisions over the three-year time period. In addition, there were **35** collisions on **National Park Service** lands; however, the total number of collisions on NPS lands is not known for the 1997-1999 time period.

Year	**Collisions Involving Bikes**	**Total Collisions**	**Percent of Total**
1997	259	13896	1.85%
1998	253	11341	2.23%
1999	262	12955	2.02%
3-yr Total: TARAS	*772*	*38192*	*2.02%*
NPS (1997-1999)	*35*		
Total	*809*		
Yearly Average	*270*	*12,731*	*2.02%*

✍✍Over the three-year period, there were two cyclist fatalities, both in 1999, out of approximately 140 traffic fatalities overall. The two fatalities were both males over 35 years of age. One collision occurred on September 12 in the 800 block of 52nd St., NE (time unknown) and was due to cyclist inattention. The second occurred a little more than one month later on October 27 at the intersection of 3rd St. and Independence Ave., SW, at 6:00am, and was due to the cyclist's failure to obey the traffic signal.

✍✍Reports of collisions between cyclists and pedestrians totaled 29 over the three-year time period. However, this may be far lower than the actual number as few of these accidents are reported to the police. Additionally, in one 1998 collision, a cyclist was responsible for one pedestrian fatality—knocking the person to the ground, where they struck their head in a fatal blow.

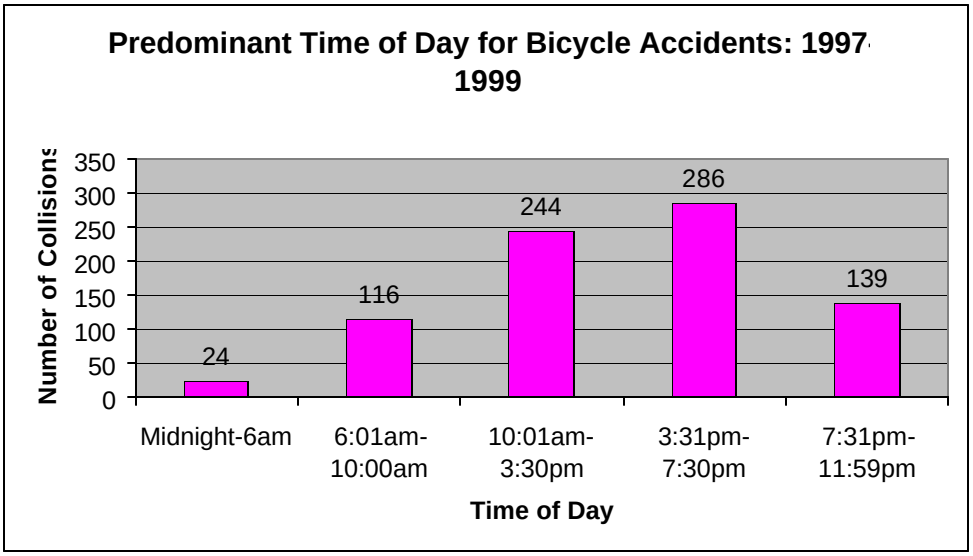
Year	**Number of Collisions with Pedestrians**
1997	10
1998	10
1999	9

✍✍Hit and run collisions involving cyclists accounted for almost 16% of all bicycle collisions.

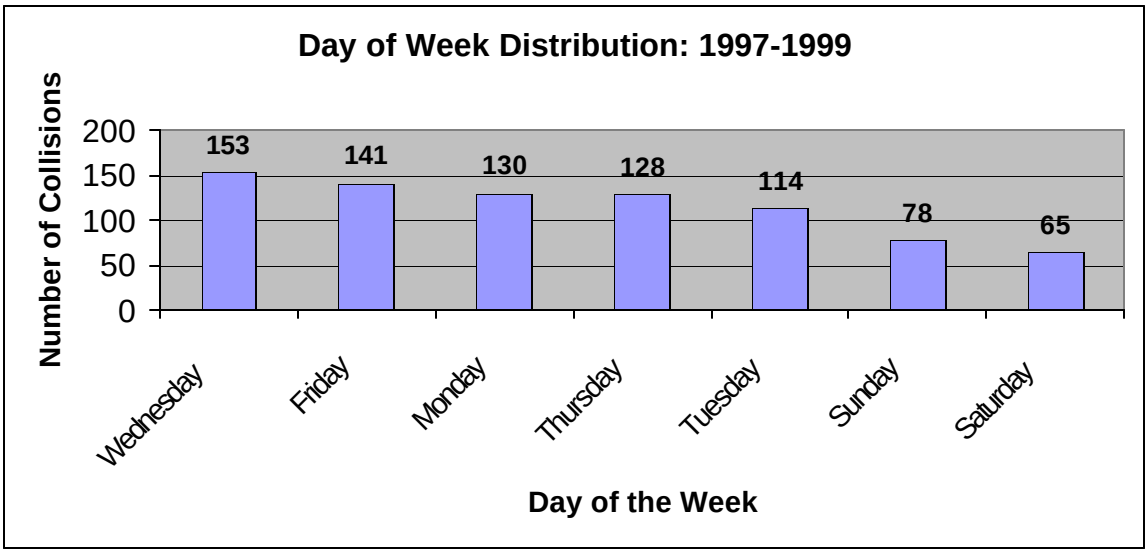
Year	Hit-and-Run Collisions vs. all Bike Collisions	Hit-and-Runs Involving Bikes vs. All Hit-and-Run Collisions	All Hit-and Runs vs all Collisions
1997	46/259✍ 17.5%	46/4884✍ ~1%	4884/13896 ? 35%
1998	40/253✍ 15.4%	40/3767 ✍ 1%	3767/11341 ? 33%
1999	41/261✍ 14.9%	41/4210 ✍~1%	4210/12955 ? 32%
3-yr average	**15.9%**	**~1%**	**33.3%**

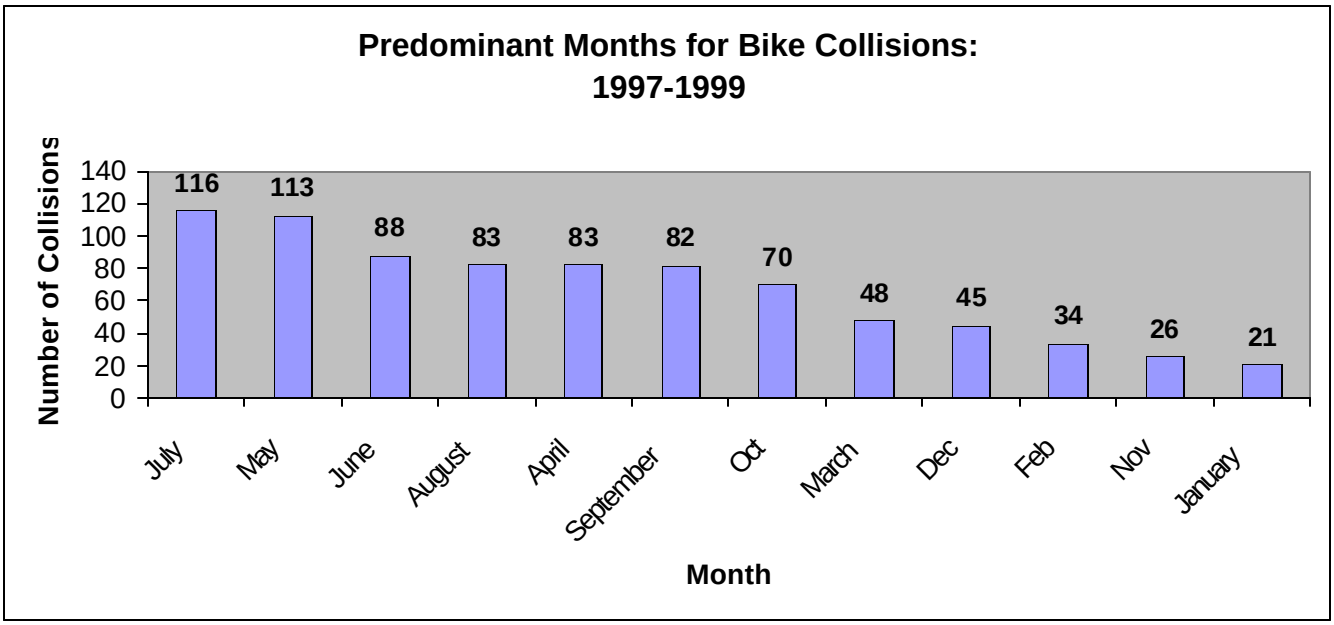
Collision Frequency[1]

✍✍Bicycle collisions were most likely to occur on a weekday, during evening rush hour in early summer. The charts below show the distributions of collisions over the three-year period.



[1] Time of day, day of week and month of year information contains National Park Service data.





Collision Locations

✍✍The most dangerous intersections for cyclists were as follows:

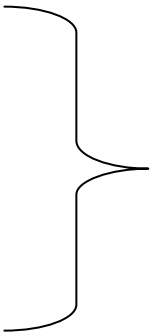
Connecticut Ave. & L St., NW
13th St. & I St., NW
✍ **7 collisions each**

17th St. & K St., NW
✍ 6 collisions

Connecticut Ave. & K St., NW
Massachusetts Ave. & Observatory Circle, NW
✍ 5 collisions each

16th St. & Columbia Rd., NW

13th St. & Columbia Rd., NW
14th St. & Florida Ave., NW
14th St. & I St., NW
14th St. & K St., NW
16th St. & Florida Ave., NW
16th St. & L St., NW
17th & Columbia Rd., NW
17th St. & Pennsylvania Ave., NW
Wisconsin Ave. & M St., NW



✍ 4 collisions each

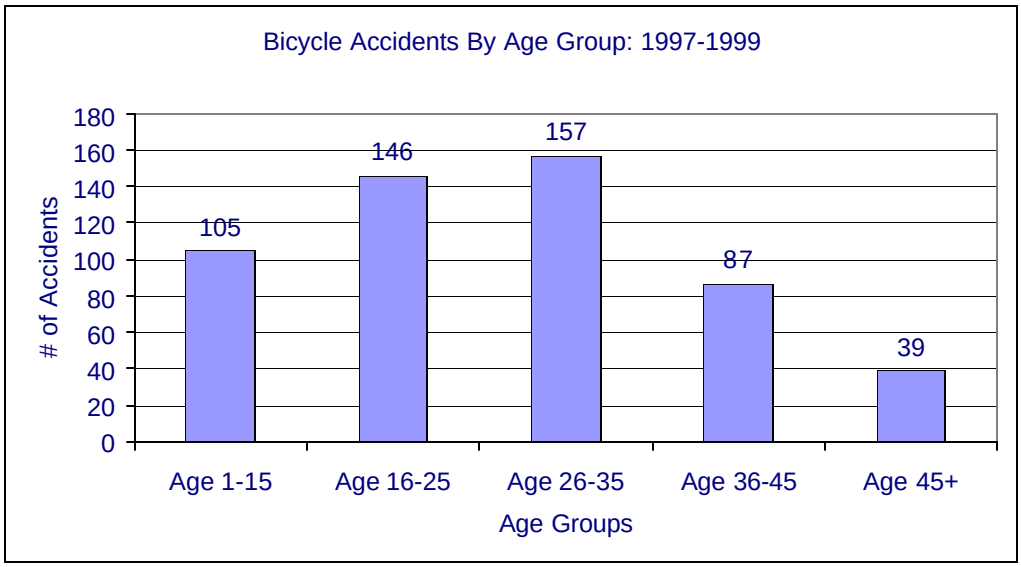
✍✍Collisions broken out by Ward are as follows[2]:

Ward 1 ✍ 148
Ward 2 ✍ 337
Ward 3 ✍ 43
Ward 4 ✍ 42
Ward 5 ✍ 38
Ward 6 ✍ 60
Ward 7 ✍ 28
Ward 8 ✍ 25

Cyclist Profile

✍✍Cyclists involved in collisions over the three-year period were most likely to be male—in approximately 89% of reported incidents. Based on available information, the median age of these cyclists was 25, with cyclists in the 26-35 year old age group accounting for the most collisions. Children aged 15 and younger were involved in 105 collisions, or about **14%** of all collisions, from 1997-1999. The chart below shows the age distributions of those involved.

[2] Ward data was not collected in the original PD-10 reports. Figures shown here were derived from shape files created in ARCView/GIS, based on intersection and block address data collected from the PD-10 forms. Where intersection and block address data was not available, a map point could not be created, so not all collisions could be mapped. Since some collisions could not be mapped and Ward breakdowns are based on mapped data, Ward figures will not add up to aggregate collision figures shown in this report.



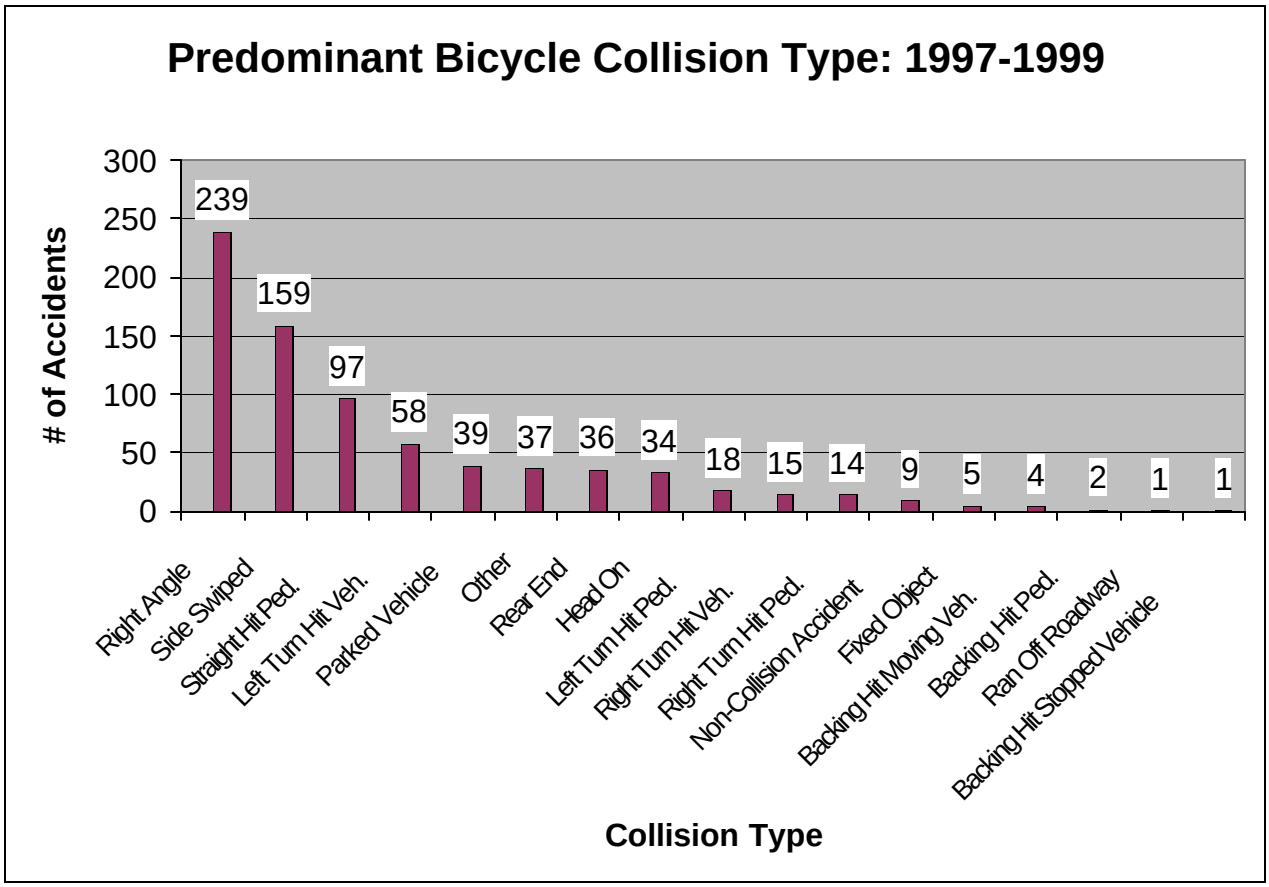
- There were approximately 13 reported collisions from 1997-1999 where the cyclist's abilities were recorded as impaired.

Type of Collision

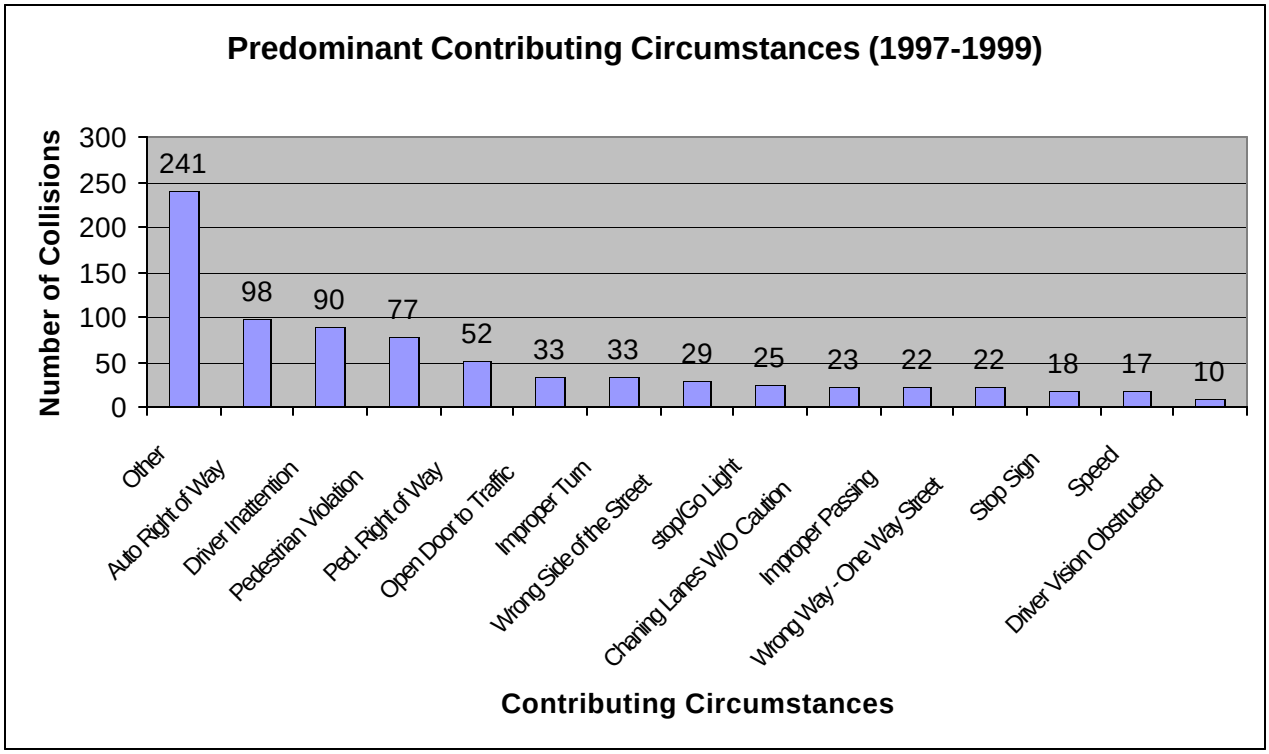
- Over the three-year period, the predominant type of collision was a "**right angle.**" This is where a car and cyclist collide at a right angle, most likely at an intersection or driveway.

- The number two "contributing circumstance" was "**Auto Right of Way,** meaning automobile had the right of way."[3] The charts below show the distribution of collision type and contributing circumstances.

[3] The number one contributing circumstance turned out to be 'Other,' which does not offer much in the way of information for analysis. This reporting 'flaw' has been brought to DC MPD's attention and hopefully will be addressed in the next update of the PD-10.

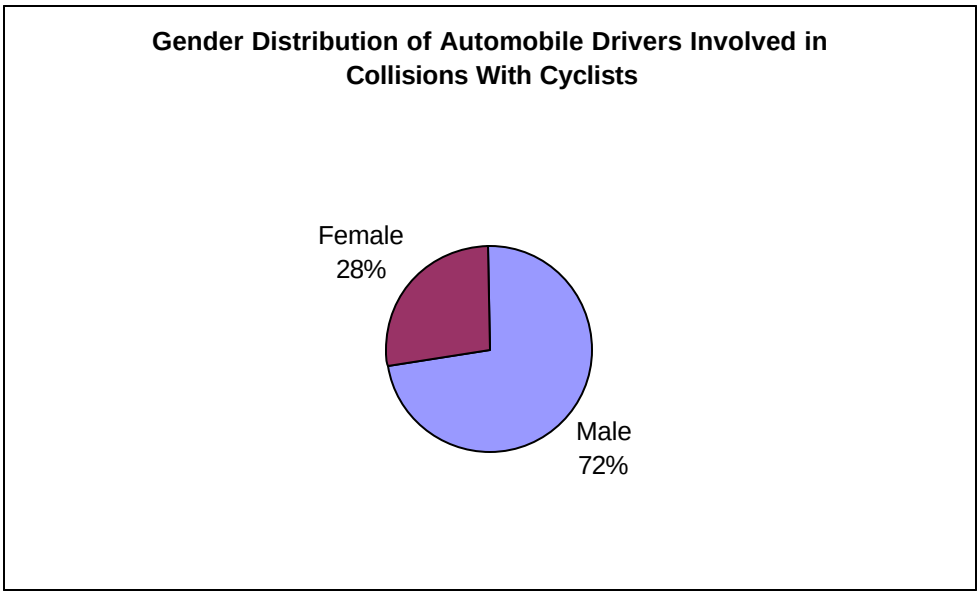


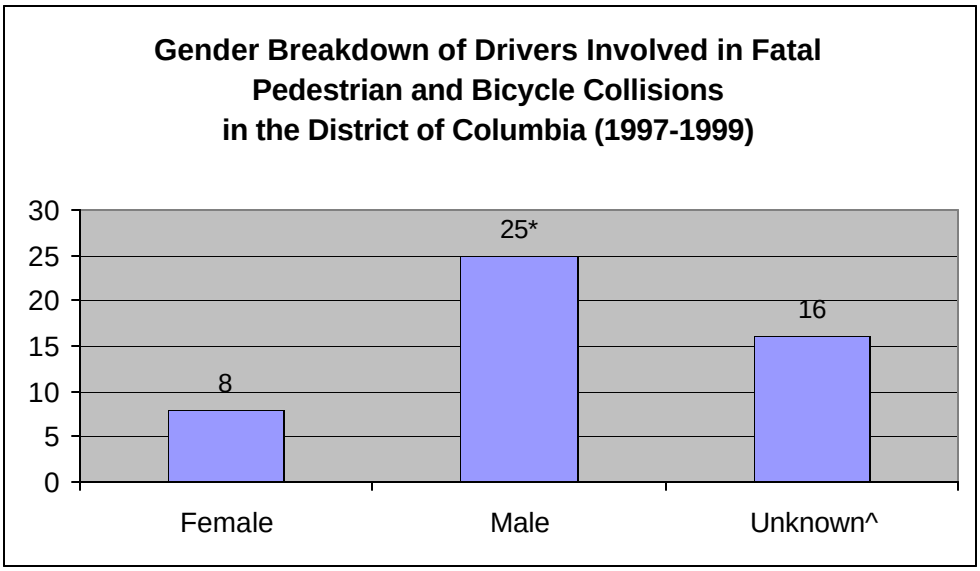
Pedestrian in these charts most likely refers to the bicyclist.



Automobile Driver Profile

There were 774 reported collisions involving bicycles over the three-year period, however, a number of those collisions involved more than one automobile. An analysis of available information on all automobile drivers involved in these collisions with cyclists showed that about 72% were male, with an average age of 40 years. The average age for the 28% of drivers who were female was 37.5.





*In two fatal collisions where the driver of the striking vehicle was male, *two* pedestrians were killed.
^ Twelve of these accidents were Hit & Runs.